

IN THE CLAIMS:

Please amend Claims 1, 3, 4, 14, 20, 22, 24 and 33, and add Claims 109 to 112 as follows. The claims, as pending in the subject application, read as follows:

1. (Currently Amended) A method of communicating between communication stations adapted to communicate with each other when at least one of the communication stations supplies a synchronisation signal, the station then functioning in base station mode using a single frequency and the stations not supplying a synchronisation signal but synchronising using the single frequency on a synchronisation signal sent by a station functioning in base station mode then functioning in mobile station mode,

wherein the method includes a request operation during which a first base station transmits, to a mobile station, a request for the storage in memory and transmission, by the mobile station, of a message to a communication station for which the message is intended and which is not synchronised with or not using the single frequency with the first base station.

2. (Previously Presented) The method according to Claim 1, further including a response operation during which the mobile station transmits, to the first base station, a message accepting or refusing transmission of the message to the message destination station.

3. (Currently Amended) The method according to Claim 2, wherein, when the mobile station transmits an acceptance message to the first base station, it next

performs a detachment operation, during which the mobile station desynchronises from the first base station, the mobile station then not being synchronized with the first base station.

4. (Currently Amended) The method according to Claim 3, wherein, following the detachment operation, the mobile station performs an attachment operation during which it synchronises with a second base station, without the two base stations synchronising with each other, the two base stations then not being synchronized with each other.

5. (Previously Presented) The method according to Claim 4, wherein, following the attachment operation, the mobile station performs a second transmission operation, during which the mobile station transmits the message to the message destination station.

6. (Previously Presented) The method according to Claim 1, wherein, preliminary to the request operation, the first base station performs an operation of selecting, from a location table, the mobile station which is the destination of the request to store in memory and to transmit.

7. (Previously Presented) The method according to Claim 2, wherein, if during the response operation the mobile station transmits to the first base station a message refusing transmission of the message, the base station performs a new operation of

selecting, from a location table, a mobile station which is the destination of the request to store in memory and to transmit.

8. (Previously Presented) The method according to Claim 6, wherein, preliminary to the selection operation, the first base station performs an operation of determining synchronisation or not of the message destination station with the first base station and, only when the message destination station is not synchronised with the first base station, an operation of selecting a mobile station which is the destination of the request to store in memory.

9. (Previously Presented) The method according to Claim 8, wherein, during the operation of determining the synchronisation or not of the message destination station with the first base station, the base station performs an operation of reading, in a location table, the operating mode of the message destination station, and

when the message destination station is functioning in base station mode, it is determined that the message destination station is not synchronised with the first base station, and

when the message destination station is functioning in mobile station mode, during the reading operation, the base station performs an operation of reading the identity of a base station with which the message destination station is synchronised and, when the base station with which the message destination station is synchronised is not the first base station, it is determined that the message destination station is not synchronised with the first base station.

10. (Previously Presented) The method according to Claim 1, wherein, during the request operation, the first base station transmits, to the mobile station, the content of the message to be transmitted to the message destination station.

11. (Previously Presented) The method according to Claim 1, wherein, during the request operation, the first base station transmits, to the mobile station, an identifier for the message destination station.

12. (Previously Presented) The method according to Claim 1, wherein, during the request operation, the first base station transmits, to the mobile station, an identifier for the first base station.

13. (Previously Presented) The method according to Claim 1, wherein, during the request operation, the first base station transmits, to the mobile station, an identifier for a source station which supplies, to the first base station, the message to be transmitted to the message destination station.

14. (Currently Amended) A method of communicating between communication stations adapted to communicate with each other when at least one of the communication stations supplies a synchronisation signal, the station then functioning in base station mode using a single frequency and the stations not supplying a synchronisation signal but synchronising using the single frequency on a synchronisation signal sent by a

station functioning in base station mode then functioning in mobile station mode, wherein the method includes:

a first operation of receiving a message, during which a mobile station synchronised with a first base station receives a message coming from the first base station, an operation of detachment and attachment, during which the mobile station synchronises with a second base station, without the two base stations synchronising with each other, the two base stations then not being synchronized with each other, and a second transmission operation, during which the mobile station transmits the message to the second base station.

15. (Previously Presented) The method according to Claim 14, wherein, following the message reception operation and preliminary to the detachment and attachment operation, the mobile station performs an availability test during which it determines whether a communication would be interfered with by the detachment and attachment operation and, if during the availability test it is determined that no communication would be interfered with by a detachment and attachment operation, the detachment and attachment operation is performed.

16. (Previously Presented) The method according to Claim 15, wherein, during the availability test, the mobile station determines whether or not it is participating in a current communication and, if it is participating in a current communication, it is determined that a communication would be interfered with by a detachment and attachment operation.

17. (Previously Presented) The method according to Claim 14, wherein, following the message reception operation and preliminary to the detachment and attachment operation, the mobile station performs an availability test during which it determines whether or not a quantity of energy available to it is greater than a predetermined quantity and, if during the availability test it is determined that the quantity of energy is greater than the predetermined quantity, the detachment and attachment operation is performed.

18. (Previously Presented) The method according to Claim 14, wherein, preliminary to the detachment and attachment operation, the mobile station performs a response operation during which the mobile station transmits, to the first base station, a message accepting transmission of the message.

19. (Previously Presented) The method according to any one of Claims 1 and 14, wherein the message represents traffic between the mobile stations synchronised on the first base station and the first base station.

20. (Currently Amended) ~~The A method according to Claim 19, of communicating between communication stations adapted to communicate with each other when at least one of the communication stations supplies a synchronisation signal, the station then functioning in base station mode and the stations not supplying a synchronisation signal but synchronising on a synchronisation signal sent by a station functioning in base station mode then functioning in mobile station mode,~~

wherein the method includes a request operation during which a first base station transmits, to a mobile station, a request for the storage in memory and transmission, by the mobile station, of a message to a communication station for which the message is intended and which is not synchronised with the first base station,

and wherein the message represents traffic between the mobile stations synchronised on the first base station and the first base station,

and wherein the message destination station is the second base station, and the second base station performs, on receipt of the message, an operation of determining the total traffic during which it determines whether or not the sum:

of the traffic between the mobile stations synchronised on the first base station and the first base station, on the one hand, and

the traffic between the mobile stations synchronised on the second base station and the second base station, on the other hand, is less than a predetermined value.

21. (Previously Presented) The method according to Claim 20, wherein when, during the total traffic determination operation, it is determined that the sum:

of the traffic between the mobile stations synchronised on the first base station and the first base station, on the one hand, and

the traffic between the mobile stations synchronised on the second base station and the second base station, on the other hand,

is less than the predetermined value, one of the base stations performs an operation of switching into mobile station mode and synchronises on the other base station.

22. (Currently Amended) The A method according to Claim 19, of communicating between communication stations adapted to communicate with each other when at least one of the communication stations supplies a synchronisation signal, the station then functioning in base station mode and the stations not supplying a synchronisation signal but synchronising on a synchronisation signal sent by a station functioning in base station mode then functioning in mobile station mode,

wherein the method includes a request operation during which a first base station transmits, to a mobile station, a request for the storage in memory and transmission, by the mobile station, of a message to a communication station for which the message is intended and which is not synchronised with the first base station,

and wherein the message represents traffic between the mobile stations synchronised on the first base station and the first base station,

and wherein the message destination station is the second base station, and on reception of the message, the second base station performs a first operation of determining the distribution of traffic between the two base stations during which the second mobile station determines whether or not:

on the one hand, the traffic between the mobile stations synchronised on the first base station and the first base station is less than a predetermined value, and

on the other hand, the traffic between the mobile stations synchronised on the second base station and the second base station is greater than a predetermined value.

23. (Previously Presented) The method according to Claim 22, wherein when, during the first traffic distribution determination operation, it is determined that:



the traffic between the mobile stations synchronised on the first base station and the first base station is less than a predetermined value, on the one hand, and

the traffic between the mobile stations synchronised on the second base station and the second base station is greater than a predetermined value, on the other hand,

the second base station performs an operation of seeking a communication to be transferred during which the second mobile station determines whether at least one of the communications between mobile stations which are synchronised with the second base station can be transferred to the first base station.

24. (Currently Amended) A device for communication between communication stations adapted to communicate with each other when at least one of said communication stations supplies a synchronisation signal, said station then functioning in base station mode using a single frequency and the stations not supplying a synchronisation signal but synchronising using the single frequency on a synchronisation signal transmitted by a station functioning in base station mode then functioning in mobile station mode,

wherein the device comprises, in a first base station, request means adapted to transmit, to a mobile station, a request for the storage in memory and transmission, by said mobile station, of a message, to a message destination communication station which is not synchronised with or not using the single frequency with said first base station.

25. (Previously Presented) The device according to Claim 24, further comprising, in the first base station:

a memory containing a location table representing communication stations,  
and

a selection means, adapted to select, from said location table, the mobile station which is the destination of the request to store in memory and to transmit.

26. (Previously Presented) The device according to Claim 25, wherein, when a selected mobile station transmits to the first base station a message refusing transmission of the said message, the selection means is adapted to select, from said location table, a new mobile station which is the destination of the request to store in memory and to transmit.

27. (Previously Presented) The device according to Claim 25, further comprising means for determining the synchronisation or not of the message destination station with the first base station, and only when the message destination is not synchronised with the first base station, the selection means effects a selection, from said location table, of a mobile station which is the destination of the request to store in memory.

28. (Previously Presented) The device according to Claim 27, wherein:  
A) the location table contains, at least for each mobile station, information representing the identity of a base station with which the mobile station is synchronised,  
and

B) the synchronisation determination means is adapted to read, from the location table, the operating mode of the message destination station, and:

when the message destination station is functioning in base station mode, to determine that the message destination station is not synchronised with the first base station, and

when the message destination station is functioning in mobile station mode, the synchronisation determination means is adapted to read, from said location table, the identity of a base station with which the message destination station is synchronised and, when the base station with which the message destination station is synchronised is not the first base station, it is determined that the message destination station is not synchronised with the first base station.

29. (Previously Presented) The device according to Claim 24, wherein the request means is adapted to transmit, with said request, to the mobile station, the content of the message to be transmitted to the message destination station.

30. (Previously Presented) The device according to Claim 24, wherein the request means is adapted to transmit, with said request, to the mobile station, an identifier for the message destination station.

31. (Previously Presented) The device according to Claim 24, wherein the request means is adapted to transmit, with said request, to the mobile station, an identifier for the first base station.

32. (Previously Presented) The device according to Claim 24, wherein the request means is adapted to transmit, with said request, to the mobile station, an identifier for a source station which supplies, to the first base station, the message to be transmitted to the message destination station.

33. (Currently Amended) A device for communication between communication stations adapted to communicate with each other when at least one of said communication stations supplies a synchronisation signal, said station then functioning in mobile station mode using a single frequency and the stations not supplying a synchronisation signal but synchronising using the single frequency on a synchronisation signal transmitted by a station functioning in base station mode then functioning in mobile station mode, the device comprising:

in a mobile station synchronised with a first base station, first means of receiving a message, adapted to receive a message coming from said base station,

detachment and attachment means adapted to synchronise said mobile station with a second base station, without the two base stations synchronising with each other, the two base stations being then not synchronized with each other,

said transmission means also being adapted to transmit the message to said second base station when said mobile station is synchronised with said second base station.

34. (Previously Presented) The device according to Claim 33, wherein the transmission means is also adapted to transmit, to said first base station, a message accepting or refusing transmission of said message to the message destination station.

35. (Previously Presented) The device according to any one of Claims 24 and 33, wherein said transmission means is adapted so that said message represents traffic between the mobile stations synchronised on the first base station and the first base station.

36. (Previously Presented) A network, wherein it has at least two devices according to any one of Claims 24 and 33.

37. (Previously Presented) A telephone, wherein it has a device according to any one of Claims 24 and 33.

38. (Previously Presented) A photographic apparatus, wherein it has a device according to Claims 24 and 33.

39. (Previously Presented) A printer, wherein it has a device according to any one of Claims 24 and 33.

40. (Previously Presented) A scanner, wherein it has a device according to any one of Claims 24 and 33.

41. (Previously Presented) A camera, wherein it has a device according to any one of Claims 24 and 33.

42. (Previously Presented) A computer, wherein it has a device according to any one of Claims 24 and 33.

43. (Previously Presented) A facsimile machine, wherein it has a device according to any one of Claims 24 and 33.

44. (Previously Presented) A television receiver, wherein it has a device according to any one of Claims 24 and 33.

45. (Previously Presented) An audio/video player, wherein it has a device according to any one of Claims 24 and 33.

46. (Previously Presented) An information storage means which can be read by a computer or a microprocessor storing instructions of a computer program, wherein it makes it possible to implement a communication method according to any one of Claims 1 and 14.

47. (Previously Presented) An information storage means which is removable, partially or totally, and which can be read by a computer or a microprocessor storing instructions of a computer program, wherein it makes it possible to implement a communication method according to any one of Claims 1 and 14.

48. (Previously Presented) A computer program product, wherein it comprises software code portions for implementing a communication method according to any one of Claims 1 and 14.

49.-108. (Canceled)

109. (New) A method of communicating between communication stations adapted to communicate with each other when at least one of the communication stations supplies a synchronisation signal, the station then functioning in base station mode and the stations not supplying a synchronisation signal but synchronising on a synchronisation signal sent by a station functioning in base station mode then functioning in mobile station mode, wherein the method includes:

a first operation of receiving a message, during which a mobile station synchronised with a first base station receives a message coming from the first base station,

an operation of detachment and attachment, during which the mobile station synchronises with a second base station, without the two base stations synchronising with each other, and

a second transmission operation, during which the mobile station transmits the message to the second base station,

and wherein the message represents traffic between the mobile stations synchronised on the first base station and the first base station,

and wherein the message destination station is the second base station, and the second base station performs, on receipt of the message, an operation of determining the total traffic during which it determines whether or not the sum:

of the traffic between the mobile stations synchronised on the first base station and the first base station, on the one hand, and

the traffic between the mobile stations synchronised on the second base station and the second base station, on the other hand, is less than a predetermined value.

110. (New) The method according to Claim 109, wherein when, during the total traffic determination operation, it is determined that the sum:

of the traffic between the mobile stations synchronised on the first base station and the first base station, on the one hand, and

the traffic between the mobile stations synchronised on the second base station and the second base station, on the other hand,

is less than the predetermined value, one of the base stations performs an operation of switching into mobile station mode and synchronises on the other base station.

111. (New) A method of communicating between communication stations adapted to communicate with each other when at least one of the communication stations supplies a synchronisation signal, the station then functioning in base station mode and the stations not supplying a synchronisation signal but synchronising on a synchronisation signal sent by a station functioning in base station mode then functioning in mobile station mode, wherein the method includes:



a first operation of receiving a message, during which a mobile station synchronised with a first base station receives a message coming from the first base station,  
an operation of detachment and attachment, during which the mobile station synchronises with a second base station, without the two base stations synchronising with each other, and

a second transmission operation, during which the mobile station transmits the message to the second base station,

and wherein the message represents traffic between the mobile stations synchronised on the first base station and the first base station,

and wherein the message destination station is the second base station, and on reception of the message, the second base station performs a first operation of determining the distribution of traffic between the two base stations during which the second mobile station determines whether or not:

on the one hand, the traffic between the mobile stations synchronised on the first base station and the first base station is less than a predetermined value, and

on the other hand, the traffic between the mobile stations synchronised on the second base station and the second base station is greater than a predetermined value.

112. (New) The method according to Claim 111, wherein when, during the first traffic distribution determination operation, it is determined that:

the traffic between the mobile stations synchronised on the first base station and the first base station is less than a predetermined value, on the one hand, and

the traffic between the mobile stations synchronised on the second base station and the second base station is greater than a predetermined value, on the other hand, the second base station performs an operation of seeking a communication to be transferred during which the second mobile station determines whether at least one of the communications between mobile stations which are synchronised with the second base station can be transferred to the first base station.